

requests then to \\SWOWREDIR\SHARENAME are redirected on the fly to the machine designated by the software player 132. Also, the request can be retargeted to use the FTP control port, 21. This enables further penetration of many corporate firewalls.

- 5           The NetBIOS session is preferably proxied as described. Specifically, the port proxy of the player 132 listens again to the loopback interface under the name SWOWPROXY in step 916. Then any request to \\SWOWPROXY\SHARENAME are relayed to address of the server system 112 over port 21 in step 918.

First, however, the NetBIOS session is preferably wrapped in HTTP in step 917.

- 10          The port proxy, rather than simply relaying packets, queues up a request until a ~~predetermined point~~<sup>~~are~~ is</sup> ~~is reached~~<sup>are</sup>. The current accumulated data ~~is then~~<sup>are</sup> sent to the server system in the form of an HTTP POST transaction.

- In this final case, NetBIOS and SMB packets are not simply relayed. The port proxy of the player 132 assembles the SMB packets into requests. The proxy will  
15          queue up a request until it is complete, then forward it in its entirety to the other end of the HTTP connection, a server side HTTP proxy.

- In the case of the client, the proxy will read the first four bytes of an SMB request. This determines the number of bytes which are to follow and the actual SMB/NetBIOS command. Each request is then read to completion and then transmitted  
20          using the HTTP protocol to the server side proxy. The format of this transmission follows an HTTP POST transaction as this example shows: